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Endangered Species Act Lessons Over 30 Years, and the Legacy of the Snail Darter, a Small Fish in a Pork Barrel

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SYMPOSIUM ESSAY

ENDANGERED SPECIES ACT LESSONS OVER 30 YEARS, AND THE LEGACY OF THE SNAIL DARTER, A SMALL FISH IN A PORK BARREL

BY
ZYGMENT J.B. PLATER*

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* © Zygmunt J.B. Plater, 2004. Professor of Law, Boston College Law School. The author was petitioner, appellee, counsel, and lobbyist for the farmers, Cherokees, and environmentalists who sought to block the TVA Tellico Dam based on the project's violations of the Endangered Species Act. With other participants in this Symposium, the author expresses his appreciation for the planning and hospitality that made this academic gathering so rewarding for all who had the privilege of attending it.

I. THE ENDANGERED SPECIES ACT . . . DISTINCTIVELY DIFFERENT

Why is it—amidst the flood of environmental statutes that poured into the law books and national consciousness in the remarkable decade of the 1970s¹—that the Endangered Species Act of 1973 (ESA)² stands out as quite uniquely different? The ESA, celebrated and probed in this Thirtieth Anniversary Symposium, has always stood apart from the rest, sharing only superficial similarities with its distinguished statutory brethren.

The ESA marched into the law books relatively early in the parade as the fourth major environmental statute, after the National Environmental Policy Act (NEPA),³ the Clean Air Act (CAA),⁴ and the Clean Water Act (CWA).⁵ Like NEPA, the ESA was drafted in generalized policy terms, reflecting politicians' opportunistic reaction to the public's strong feelings of the moment, and, like NEPA's litigable enforcement provisions, the ESA's teeth similarly lay hidden within its prose, unrecognized by the majority of legislators.⁶ Very much *unlike* NEPA, however, the prohibitions within the ESA's section 7 and section 9 turned out to be substantive, not circumventable by paperwork and procedure.

Like the CAA and the CWA, the ESA on its face purported to be merely an "amendment" of a prior-existing federal law but was dramatically more potent than its ineffectual statutory predecessors, creating an innovative and enforceable federal regime operating on a plane above traditional state administration.

Unlike the "cooperative federalism" of the two huge pollution regulatory systems, however, the ESA in practice has been virtually a federal domain, with relatively little state participation. Quite unlike the comprehensive "command-and-control" directive structure of the CAA and CWA regulatory regimes, the ESA's enforcement structure has developed

¹ The parade of major environmental statutes began in 1970. By 1980, eighty-six new or amended statutes had been added to the edifice of federal environmental law. The coursebook website for PLATER ET AL., ENVIRONMENTAL LAW & POLICY: NATURE, LAW, AND SOCIETY (3d ed. 2004) [hereinafter NATURE, LAW & SOCIETY] contains the chronology of the federal environmental statutes at <http://www.bc.edu/schools/law/library/meta-elements/pdf/FederalEnvtlStatutes.pdf>.

² 16 U.S.C. §§ 1531–1544 (2000).

³ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370e (2000).

⁴ 42 U.S.C. §§ 7401–7671q (2000).

⁵ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2000). NEPA was signed into law by President Richard Nixon on January 2, 1970; the CAA soon followed; the CWA emerged in 1972 *sub nom.* Federal Water Pollution Control Act Amendments. Although ten other statutes were promulgated up to the late fall of 1973 when the ESA was passed, none of these, with the possible exception of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651–678 (2000), had the impact of NEPA, the big pollution statutes, and the ESA.

⁶ The legislative history of NEPA reveals that the environmental impact statement requirement of NEPA's section 102(2)(c), 42 U.S.C. § 4332(2)(c) (2000), was not recognized to be a potentially functional litigation tool capable of holding agency actions hostage. *See* NATURE, LAW & SOCIETY, *supra* note 1, at 476–79. Similarly, the "no jeopardy" and "no destruction of critical habitat" provisions of section 7 of the ESA, 16 U.S.C. § 1536 (2000), and the "no take" provision of section 9 of the ESA, *id.* § 1538, lay latent in the ESA's verbal foliage until flushed out by environmental plaintiffs.

only slowly over time and has never been systematic or inexorable. Its regulatory enforcement has come primarily at the instance of citizen initiatives in courts and the administrative process rather than by proactive programmatic agency effort.

And the scope of the ESA's regulatory system is geographically quite unlike the other major federal environmental laws. No administrative agency map lays out a regulatory grid of ESA implementation structures across the United States. Instead, ESA implementation is typically citizen-prompted and opportunistic, most often focusing attention on one small place, one discrete species or less,⁷ one tiny slice of the vast diversity of species that exist on the planet. The narrative of endangered species case law often looks at just one highly localized habitat place—one creek, one spring, one cave, one valley. But by their very existence as endangered species, and by the statutory protections given them by the ESA, in systemic terms these isolated endangered species ultimately have a remarkable capacity to magnify and complicate the contexts in which they occur.

This Essay briefly surveys the ESA's differentness, its special political context, the citizen suit of great notoriety that fired up the ESA's political hotseat back in 1975, and what has changed and what has not in the years since that first eco-legal outburst.

Endangered species cases inevitably resonate upon entire ecosystems, and beyond ecosystems upon the human behaviors and human values intimately linked to the species and their habitats, then further still to political ecosystems, revealing and reflecting the contending forces that do battle within our intricate processes of democratic governance. Endangered species and the legal confrontations they create thus play out on a far broader stage than the little ecological niches that they occupy scientifically.

II. THE ESA'S POLITICAL CONTEXT

The ESA's political context, moreover, has been as distinctively different as its legal profile. In its creation and subsequent evolution over the past thirty years, the ESA has been a bemusing combination on one hand of high human principle and scientific sophistication, and on the other of quite prosaic political happenstance and infighting. The Act is a descendant of centuries of philosophical and cultural recognitions about the role of human society in the context of the natural world, dating back to public trust principles in the era of Emperor Justinian and even earlier.⁸ The ESA is an emanation of the Convention on International Trade and Endangered Species (CITES),⁹ often regarded as the single most effective international convention ever ratified by the global community, but goes far beyond

⁷ The ESA protects subspecies and distinct population segments as well. 16 U.S.C. §1532(16) (2000).

⁸ See JOHN PASSMORE, *MAN'S RESPONSIBILITY FOR NATURE: ECOLOGICAL PROBLEMS AND WESTERN TRADITIONS* 7–8 (1974). “When humans interfere with the Tao, the sky becomes filthy, the equilibrium crumbles, creatures become extinct.” LAO-TZU, *TAO TE CHING* (500 BC).

⁹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 999 U.N.T.S. 243, *reprinted in* 12 I.L.M. 1085.

CITES. The U.S. roots of the Act can be found in Earth Day 1970 and President Richard Nixon's unprecedented initial willingness to sign environmental statutes, motivated by lingering respect for early twentieth century Republican conservationism and a very pragmatic recognition of environmentalism's high public opinion polling results. In its actual legislative promulgation, the ESA's action provisions were formulated in a process of legislative obscurity by a small group of scientists and legislative activists (including Symposium speaker Dr. Gerard Bertrand) who saw a need and an opportunity for more effective protections and went about building them into the nooks and crannies of an otherwise rather innocuous and generalized regulatory law focused on poaching and trade restrictions.

The result of this process was on its face a bland and rambling statute, but lurking latent within its paragraphs were section 7, which contains the "no jeopardy" and "no destruction of critical habitat" provisions, and section 9's prohibition on "take" of endangered species. The drafters of the statute knew the potential functional importance of these provisions, and inserted strategic pieces of reinforcing legislative history into the Act's congressional process. For more than a year after the ESA was passed, however, it lay relatively dormant in the statute books, as unremarked upon as it seemed unremarkable.

The ESA, however, quickly became intensely and excruciatingly political, a pitched battleground for some of the most aggressive forces in modern politics. If this were a conference on NEPA, air pollution, or water pollution, for instance, there would not be, hanging in the background, the threat that the basic statute itself may be targeted for rescission or evisceration. After a few years of such attempts against NEPA, that statute assumed the status of apple pie and motherhood. Only the ESA is still regularly subjected to plenary denunciations on the floor of Congress; only the ESA has not had its funding reauthorized since 1988; only the ESA was hit by a sweeping one-year listing moratorium.¹⁰ It was the high profile ESA case of the northern spotted owl (*Strix occidentalis caurina*) that got hit by a rider practically eliminating the courts' jurisdiction to block timber sales in its critical habitat.¹¹ It is the ESA that has sustained amendments

¹⁰ The government's power to spend appropriations to implement the ESA was last reauthorized in Pub. L. No. 100-478, 102 Stat. 2306 (1988). Since then its funding has hung by its fingernails, based on annually contested, irregular "continuing resolutions." In 1994, Senator Kay Bailey Hutchison (R-Tex.) fronted the successful industry campaign for an ESA moratorium. Emergency Supplemental Appropriations and Rescissions for the Department of Defense to Preserve and Enhance Military Readiness Act of 1995, Pub. L. No. 104-6, 109 Stat. 73, 86 (1995). The moratorium rescinded \$1.5 million of the amounts formerly available for making threatened or endangered species or critical habitat determinations and forbade other funds from being used for these purposes. *Id.*

¹¹ That rider provided:

No restraining order or preliminary injunction shall be issued by any court of the United States with respect to any decision to prepare, advertise, offer, award, or operate . . . timber sales in fiscal year 1990 from the thirteen national forests in Oregon and Washington and Bureau of Land Management lands in Western Oregon known to contain northern spotted owls. The provisions of section 705 of title 5, United States Code, [authorizing courts to stay agency actions,] shall not apply to any challenge to such a

undermining its fundamental goal—species recovery—and granting broad exemptions to the military.¹² The CAA, CWA, and NEPA do not confront industry-based lobbying coalitions overtly dedicated to their repeal or neutralization, but the ESA faces two of them.¹³ And I would propose that political criticism orchestrated against the ESA often has a much broader ultimate target, using endangered species as a stalking horse to impose political limitations on environmental regulation in other fields as well. This political hullabaloo all started with a little fish.

III. THE LITTLE FISH THAT LAUNCHED THE ESA ON ITS TEMPEST-TOSSED COURSE

Participants in this Symposium probably know why I am here, at the threshold of an array of real experts who will present significant probing analyses of the ESA in theory and practice. It is because thirty years ago I had the dumb luck to have the first big case under the ESA walk into my classroom, ultimately carrying my students and me through six long years of legal maneuvers through federal agencies, trial court hearings, appellate arguments in the Sixth Circuit and the United States Supreme Court, and on into the marble jungles of the halls of Congress and beyond. Representing

timber sale: *Provided*, that the courts shall have authority to [issue permanent injunctions for timber sales found to be] arbitrary, capricious or otherwise not in accordance with law

Department of Interior and Related Agencies Appropriations Act, Pub. L. No. 101-121, § 318(g)(1), 103 Stat. 701, 749 (1989).

For a year, the rider removed citizens' ability to get preliminary injunctions (and foreclosed permanent injunctions except in extraordinary cases where citizens are able to prove on the restricted merits that agency action was arbitrary, capricious, etc., and by the time a case got to trial on the permanent injunction the forest stand might already be cut). Isn't the rider's approach quite revealing? Its obvious rationale is that, absent citizen enforcement, neither the private industry logging the lands nor the two federal agencies supervising the logging will comply with the ESA and federal forestry laws. In order to nullify the laws, one does not have to repeal them (and they did not have the votes to do that), but needs only to eliminate the citizen enforcers.

¹² Emergency Supplemental Appropriations for Additional Disaster Assistance, for Anti-Terrorism Initiatives, for Assistance in the Recovery from the Tragedy that Occurred at Oklahoma City, and Rescissions Act, 1995, Pub. L. No. 104-19, §§ 501-502, 109 Stat. 194, 212; National Defense Authorization Act for Fiscal Year 2004, Pub. L. No. 108-136, § 318(a), § 319(b), 117 Stat. 1392, 1433-34 (2003). The "Military Readiness" amendments created a first categorical ESA exemption, removing protections for critical habitat on military reservations. National Defense Authorization Act for Fiscal Year 2004 § 318.

¹³ NESARC, the National Endangered Species Act Reform Coalition, representing mining, grazing, agribusiness, oil and gas, real estate development, and a host of other industries, is a slick counter-ESA lobbying group; e.g., note its seductive website—<http://www.nesarc.org/> (last visited Apr. 11, 2004). The "Endangered Species Coordinating Committee" is a more clandestine initiative, primarily run by the timber and forest products industry. Charles Mann and Mark Plummer's book *Noah's Choice* is a similarly sophisticated and captivatingly written brief for making draconian choices on endangered species. See Clear the Air, Charles C. Mann and Mark L. Plummer Respond to Footnote 65 of Zygmunt Plater's Essay Law and the Fourth Estate: Endangered Nature, the Press, and the Dicey Game of Democratic Governance, 32 ENVTL. L. 589 (2002); Clear the Air, Lopsided Journalism in Public Policy Debates—Professor Plater Responds to Mann & Plummer, 32 ENVTL. L. 591 (2002).

the fish and a coalition of farmers, sportsmen, environmentalists, several parts of the Cherokee Nation, and other citizens, we won an injunction against the last, most marginal dam of the Tennessee Valley Authority (TVA); successfully defended the injunction in the Supreme Court and Congress; and won a unanimous verdict on the rational economics of our environmental case in the first-ever God Squad tribunal. (By that time we had “a project that is *95 percent complete*, and if one takes *just the cost of finishing it* against the [total] benefits, and does it properly, *it still doesn't pay!*”) ¹⁴ Victory. And then we lost the river and most of the fish's remaining natural population to a late-night, pork barrel rider on an appropriations bill that a putatively conservationist president refused to veto. ¹⁵

The case was *Hiram Hill et al. v. Tennessee Valley Authority* ¹⁶ (hereinafter *TVA v. Hill*)—an ESA citizen enforcement action brought on behalf of the little endangered snail darter fish, *Percina tanasi*, against the Tennessee Valley Authority's final dam, the Tellico Dam on the Little Tennessee River. It was an extraordinary story of a species, a place, and hundreds of citizens confronting a monolithic federal pork barrel establishment. It also became quite an extraordinary legal marker, not only in the development of endangered species law but of environmental law generally as well. ¹⁷

¹⁴ Proceedings of the First Meeting of the Endangered Species Committee 26 (Jan. 23, 1979) (statement of Charles Schultze, Chairman, Council on Economic Advisers) (emphasis added) (transcript of public hearing) (on file with author).

¹⁵ 125 CONG. REC. H1503, June 18, 1979; Energy and Water Development Appropriation Act of 1980, Pub. L. No. 96-69, 93 Stat. 437, 449–50. President Jimmy Carter anguished over his decision not to veto the rider, which also rejected the economic review board he had set up to analyze pork barrel projects. Cowed by fears of the appropriations subcommittee, he signed the bill, then called us sheepishly to apologize. See Zygmunt J.B. Plater, *Environmental Law in the Political Ecosystem—Coping with the Reality of Politics*, 19 PACE ENVTL. L. REV. 423, 462–63, 465 nn.54–55, 59 (2002).

As used here, “pork barrel” is a shorthand political science term for the powerful and complex structure of alliances throughout Congress and beyond that is driven by the annual expenditures of billions of taxpayer subsidy dollars, ladled up by appropriations committees in both chambers, and poured out into “public works” projects and programs in congressional districts across the United States. Most pork barrel projects are never subjected to economic scrutiny; within the system they are regarded as political plums—opportunities to siphon federal dollars into local congressional districts—not economically rational or necessary development priorities. Water projects constitute one of the oldest and most powerful pork barrels. See generally WILLIAM ASHWORTH, UNDER THE INFLUENCE: CONGRESS, LOBBIES, AND THE AMERICAN PORK-BARREL SYSTEM (1981); FRED POWLEDGE, WATER: THE NATURE, USES, AND FUTURE OF OUR MOST PRECIOUS AND ABUSED RESOURCE 285–89 (1982).

¹⁶ *Hill v. Tenn. Valley Auth.*, 419 F. Supp. 753 (E.D. Tenn. 1976), *rev'd*, 549 F.2d 1064 (6th Cir. 1977), *aff'd sub nom. Tenn. Valley Auth. v. Hill (TVA v. Hill)*, 437 U.S. 153 (1978). The “al.” included the author, Donald Cohen (who also exited the University of Tennessee College of Law school in the wake of the case), and the Association of Southeastern Biologists, a scientific advocacy group formed as part of the citizen coalition opposing the dam.

¹⁷ In an online poll of environmental law professors from across the country seeking a consensus on the ten most important court cases in the history of environmental law, *TVA v. Hill* received the highest number of votes, almost twice as many as the two cases that placed second (*Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984) and *Ethyl Corp. v. Env'tl. Protection Agency*, 541 F.2d 1 (D.C. Cir. 1976)). Posting of James Salzman, salzman@wcl.american.edu, to envlawprofs@darkwing.uoregon.edu (Oct. 26, 2001) (copy on

Let me assure you that the snail darter's litigation successes were not attributable to great lawyering, but rather to the environmental merits of the factual case and the legal merits of an extraordinary statute at the historical moment when it first showed its teeth.

The story of the darter versus TVA's Tellico Dam has been recounted a number of times over the years,¹⁸ although the little fish's folkloric public image remains a caricature of what it never was.¹⁹ The snail darter is a two-and-half-inch-long perch, highly adapted to a life cycle in broad, shallow, clear, cool, big-river conditions flowing over rocky shoals. The last place left on earth in which significant numbers of the species lived was within the last flowing 33 miles of the Little Tennessee River, on shoals in the farm country valley 20 miles west of the Smoky Mountains, close to the river's junction with the completely-dammed Big Tennessee River southwest of Knoxville, Tennessee. In human terms as well, the "Little T," because of its high quality, fertility, and uniqueness as a flowing watercourse, was also an extraordinary recreational resource for fishermen and boaters, heavily used by visitors from eastern Tennessee, South Carolina, and Georgia. For centuries, until Andrew Jackson's armies came through, its incredibly fertile valley had been the heartland of the Cherokee Nation, and continued to be its most sacred place. These human qualities, combined with the existence of the endangered darter, provided impetus for the motley coalition that took the case to the Supreme Court.

What is the number one cause of endangerment to the species of the world? By general consensus it is the destruction and modification of *habitat*. After tens of thousands of years of evolutionary adaptation to its flowing river ecological habitat that once existed throughout the region, the snail darter's populations had been unknowingly destroyed one by one, starting in 1936, as the Tennessee Valley Authority built dozen after dozen of its dams. By the early 1970s, 69 dams impounding 2,500 linear miles of river had been built in the region, and the last place left with high quality, big river

file with author).

¹⁸ See, e.g., Zygmunt J.B. Plater, *The Snail Darter, the Tellico Dam, and Sustainable Democracy—Lessons from a Classic Environmental Law Controversy*, 2001 MERCER LAW SCHOOL INTERNET VIRTUAL LECTURE SERIES, at <http://www.law.mercer.edu/elaw/zygplater.html> (last visited Apr. 11, 2004); Zygmunt J.B. Plater, *In the Wake of the Snail Darter: An Environmental Law Paradigm and Its Consequences*, 19 J.L. REFORM 805 (1986), reprinted in 19 LAND USE AND ENV'T L. REV. 389 (1988). The Tellico Dam narrative is the subject of an ongoing book project that was started at the time of my previous visit to the hospitable campus of Lewis and Clark Law School in 2001.

¹⁹ As reported during the 1970s, the story consistently came down to a simple caricature: the snail darter, a two-inch minnow, misused by extremist environmentalists at the last possible moment to halt completion of a massive \$150 million hydroelectric dam. In fact, every element of that summary was incorrect: The fish was a perch, the dam cost only \$5 million, it was a recreational and land-development project, the core members of the plaintiffs group were farmers whose lands were being condemned for resale, and the fish issue arose years before most of the project's budget was committed, as the law was ignored by an obstinate bureaucracy bent on building a project that had no rational economic justification. The perceived image of the case, however, had an immutable force of its own. Then, as now, it possessed more importance than the facts as they existed on the record, and in that irony lies one of the important lessons to be drawn from the case.

habitat was that last 33 miles of the Little Tennessee. Thus, by its existence as an endangered species in this last undammed place, the snail darter was a vivid ecological and legal indicator of the fact that this was the last such high-quality, undammed place remaining for the interests of human society as well as for small fish.

It is typically impossible to separate the ecology of endangered species from the political and financial human contexts in which they are found, and this species was a perfect example of that troublesome proposition. The project that threatened the last significant population of the species was a dam that focused major political and institutional forces, and raised a wide variety of human as well as ecological consequences. As the last of almost six-dozen dams, this one was marginal, too insignificant on its merits to be justified in terms of power, flood control, water supply, navigation, or any other traditional justifications for building a dam. But the human ecology of the case involved TVA, an extremely powerful and persistent bureaucratic entity that, starting in the 1930s, had made its reputation with public works construction projects. According to the analysis of contemporary historians, TVA was suffering a crisis of internal morale that desperately was thought to require construction of yet another dam project in order to restore a sense of momentum and institutional power.²⁰

So in order to justify building its desired project in a location that was ineffective for traditional dam uses, the Authority hypothesized two extraordinary project benefit claims. The first was that the reservoir, eliminating this last flowing stretch of high-quality recreational river (in a setting with 24 other recreational reservoirs within 50 miles), would *increase* the region's net recreational benefits by \$1.4 million a year, almost half of the total project benefit claims. The second claim was that 20% more of the project benefits would be generated by land sales and development, by condemning more than three times as much land as needed for the reservoir for resale and saying that the Boeing Corporation hypothetically would build a model city there.²¹ This fantasy projection allowed TVA to take more than 300 family farms from their owners for resale of the land. In retrospect the Tellico project has been recognized as economically unjustifiable, wiping out a stable farm community on thousands of acres of some of the best agricultural bottomland soils in the nation for net overall losses. The farmers organized and became the core of opposition to the dam.

²⁰ See WILLIAM BRUCE WHEELER & MICHAEL J. McDONALD, *TVA AND THE TELLICO DAM, 1936-1979: A BUREAUCRATIC CRISIS IN POST-INDUSTRIAL AMERICA* 3-33 (1986); STEPHEN J. RECHICHAR & MICHAEL R. FITZGERALD, *THE CONSEQUENCES OF ADMINISTRATIVE DECISION: TVA'S ECONOMIC DEVELOPMENT MISSION AND INTRAGOVERNMENT REGULATION* (1983). These books provide background data on the history and merits of the controversy and on TVA's adamancy in pushing the dam in the face of the law and critical negative analyses of its economic merits.

²¹ See TENNESSEE VALLEY AUTHORITY ENVIRONMENTAL STATEMENT: *TIMBERLAKE NEW COMMUNITY* (1976). Under S. DOC. NO. 97 (1964), every federal agency, when spending taxpayer dollars, had to have a theoretically profitable benefit-cost ratio—for every taxpayer dollar spent, the proposed project had to be able to claim to earn at least \$1.01 over 100 years. Beyond hyperbolic benefit projections, agency planners were helped in projecting their positive ratios by the fact that they could treat the cost of taxpayer dollars as interest-free, or nearly so.

Quite oblivious to the human turmoil around them, the remnant population of roughly 25,000 endangered *Percina tanasi* darted about amongst the stones on the broad shoals near Coytee Springs in the Little Tennessee River, a strategic ecological presence at the center of an impending conflict over how the natural river would be developed. Absent this endangered species, the American system of government provided no practical forum in which the true economic and environmental merits of the case could be raised to block completion of a destructive, uneconomic public works project. With the addition of the endangered fish, the situation changed completely.

In October 1974 (a year after the passage of the ESA), as TVA was gearing up to finish the dam after a 16-month stay while the agency overrode a NEPA injunction brought by the farmers, one of my students, Hiram "Hank" Hill, was looking for an environmental law term-paper topic. He had heard about the discovery of the little darter from some ichthyology graduate students, and asked did I think it might be a sufficient topic for a 10-page research paper? Yes, I thought it just might! In a very short time both of us were meeting with the farmers still resisting the dam. At a Saturday night potluck meeting at historic old Fort Loudon, then still standing on the banks of the Little Tennessee River, Asa McCall, a grizzled old farmer who had been holding off the TVA condemnation marshals for years through grit and perseverance, took off his hat, scratched his head, and said, "I've never before heard of this little fish, but if it can save our farms I say we have to give it a try." He passed his hat, and the \$29 kicked in by the little group that evening was the start of the snail darter litigation campaign.

IV. SOME THINGS HAVE CHANGED A LOT IN THIRTY YEARS

A. Section 7 of the ESA

Back in 1974, section 7 of the ESA was short, sweet, and virtually unknown, although all of that soon changed.²² During the darter litigation, the statutory provision remained deceptively simple, only 129 words long, only 30 of which were functionally significant—

§7. INTERAGENCY COOPERATION. The Secretary [of Interior] shall review other programs administered by him and utilize such programs in furtherance of the purposes of this chapter. *All other Federal agencies shall*, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the

²² As we prepared the darter litigation, there were two other cases proceeding under section 7: a suit to block an interstate highway interchange on sandhill crane (*Grus canadensis*) habitat, *National Wildlife Federation v. Coleman*, 529 F.2d 359 (5th Cir. 1976), and a dam case in the Midwest eventually dismissed for failure to prove harm to endangered Indiana bats (*Myotis sodalis*), *Sierra Club v. Froehlke*, 534 F.2d 1289 (8th Cir. 1975). As *TVA v. Hill* moved through the courts, it was joined by Patrick Parenteau's suit against the Greyrocks Dam based on harm to whooping cranes (*Grus americanus*). *Nebraska v. Rural Electrification Admin.*, 12 Env't Rep. (BNA) 1156 (D. Neb. 1978).

conservation of endangered species and threatened species listed pursuant to section 1533 of this title and by taking such action necessary to *ensure that actions authorized, funded, or carried out*²³ by such agencies *do not jeopardize the continued existence of such endangered species* or threatened species *or result in the destruction or modification of habitat* of such species which is *determined* by the Secretary, after consultation as appropriate with the affected States, to be *critical*.²⁴

Note the two causes of action that emerge when you parse the italicized words. This paragraph is clearly not a paragon of legislative style, and legislators who voted for it in large majorities can be forgiven for not realizing that it contained actionable provisions. But if you consider the italicized words, the paragraph produces at least two—and perhaps four—statutory causes of action defining violations for which the remedies of the ESA can be invoked: jeopardizing a species' continued existence, and destroying or modifying critical habitat.²⁵ After getting the darter listed on the official endangered species list, we filed suit, took the case up through the courts, and the Supreme Court affirmed that TVA had to obey the law.

But things quickly started to change with the brouhaha that erupted after the darter injunction against Tellico Dam. Congress soon began to craft elaborate amendment provisions. Some amendments clarified the process by which agencies were to hold "consultations" with Interior's Fish & Wildlife Service about endangered species conflicts; some affected critical habitat listings, as noted in other presentations in this Symposium.

Probably the most significant amendment to section 7 was the 1978 addition of an exemption process committed to a newly-created "Endangered Species Committee"—less reverently known as the God Committee, or God Squad, in recognition of the new entity's power to authorize extinctions if its Cabinet-level members decided that a balance of

²³ What federal actions does that *not* cover?

²⁴ Endangered Species Act of 1973, Pub. L. No. 93-205, § 7, 87 Stat. 884, 892 (emphasis added).

²⁵ The two further possibilities that we chose not to litigate at that early stage were an affirmative requirement for "conservation of endangered species," and the procedural requirement for "consultation," a process that had not been subject to administrative definition at that point in time. For tactical reasons, the first two causes of action were deemed more feasible to litigate.

public interests showed a strong necessity for doing so.²⁶ Section 7 mushroomed from its 1973 text of 129 words to its present total of 4,603.

The section 7 God Squad's first assignment, in 1979, was the conflict between the snail darter and Tellico Dam.²⁷ In the snail darter case, the God Squad unanimously determined that the TVA dam project, even with 95% of its budget spent, still did not make sufficient economic sense to justify spending the last 5% of its appropriated costs. Development of the river and its valley for agriculture, light industry, and tourism linked to the national park, without the reservoir that threatened the darter, would save a national treasure and produce far more economic benefits for the region. It was a significant precedent in policy terms as well: It showed that endangered species protection can encourage constructive alternative development planning that actually improves the performance of such projects and programs. The little endangered species, by its strategic legal situation in the midst of a contested environmental case, had created the only forum practically available for successfully asserting the real public interest of this complex matter, in economic as well as ecological and aesthetic terms.

Other amendments have followed in subsequent years, as other presenters in the Symposium will discuss—restrictions and modifications in the process for listing species and even more controversially for listing critical habitat, a total moratorium against listing new species for one year in 1995 under the anti-regulatory Contract with America, the incidental take permitting process, and more.

B. ESA's Section 9 and Section 10

The ESA's second shoe dropped shortly after the snail darter case when plaintiffs in other cases started to argue that section 9's broad prohibition against "take" of endangered species, when coupled with Interior's definitions incorporating harms to essential habitat as "take," supported injunctions against *private* as well as agency actions. In response, Congress

²⁶ The exemption reads in pertinent part:

The Committee shall grant an exemption . . . if, by a vote of not less than five of its [seven] members voting in person—

(A) it determines on the record [after a full hearing] that—

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;

(iii) the action is of regional or national significance; and

(B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement . . .

16 U.S.C. § 1536(h) (2000).

²⁷ The 1978 amendments coupled the darter case with Professor Parenteau's whooping crane injunction against Greyrocks Dam. In the latter case, the committee affirmed a negotiated settlement that provided for protections of the crane, while allowing the creation of the Greyrocks Reservoir. See Proceedings of the First Meeting of the Endangered Species Committee (Jan. 23, 1979) (on file with author).

in 1982 passed a section 10 amendment authorizing the Secretary to issue permits for harms that section 9(a)(1)(B) would otherwise prohibit, "if [among several other criteria] such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."²⁸ The section 9 and section 10 battles and administrative adjustments, fueled by the Supreme Court's strong affirmation of the section 9 prohibition in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*,²⁹ vigorously continue to the present time and will be reflected in other presentations in this Symposium.

Note the structural changes these legislative amendments have made since the time the darter case was filed: The 1973 ESA's section 7 and section 9 were stark "roadblock" statutes, with no statutory detours around their strict prohibitions. Section 10 did for section 9 what the God Squad amendments had done for section 7, creating bureaucratic bypasses to the statutory roadblocks. The section 10 incidental take provision, with its developing regulatory articulation through habitat conservation plans, and the Babbitt Interior Department's "no surprises," "safe harbor," and "candidate conservation agreements," have created a new superstructure of agency-determined modifications to the simple, direct provisions that had been so directly litigatable under the terms of the 1973 law. These are the subject of extended analysis and commentary elsewhere in this Symposium. The permutations built upon the incidental take amendments can perhaps provide a mechanism for various rational flexibility adjustments that may prove necessary, but can also seriously erode the potential role of citizen enforcers. This history also raises intriguing questions about whether the ESA should have been drafted with "eco-pragmatic" balancing mechanisms for section 7 and section 9 from the start, or whether the only way the Act could develop strength was to start out stark and strong.³⁰

C. Other Changes

Other major changes have occurred to the law and policy of endangered species since the years of the snail darter case. Since the early 1970s there has been an extraordinary upwelling in the field of environmental ethics, dwelling upon endangered species issues as much as or more than any other environmental concern.³¹ There always have been ethical commentaries on the relationship between humans and our natural context, but, catalyzed by the notoriety of ESA cases, endangered species have become one of the

²⁸ Endangered Species Act Amendments of 1982, Pub. L. No. 97-304, § 6, 96 Stat. 1411, 1422.

²⁹ 515 U.S. 687 (1995).

³⁰ The process of weighing statutory designs from roadblocks to balancing mechanisms, and the practicalities of eco-pragmatism, are examined in NATURE, LAW & SOCIETY, *supra* note 1, at 772-815.

³¹ See EUGENE C. HARGROVE, FOUNDATIONS OF ENVIRONMENTAL ETHICS (1988); Eugene Hargrove, *Environmental Ethics, in CONSERVATION AND ENVIRONMENTALISM: AN ENCYCLOPEDIA* 241-44 (Robert Paehlke ed., 1995). For a comprehensive annotated bibliography of environmental ethics, visit the International Society for Environmental Ethics website at <http://www.cep.unt.edu/search.html> (last visited Mar. 11, 2004).

focal points of a voluminous and distinguished literature of environmental ethics, often invoking the snail darter's case.

As to the ecological premises of the field, in the 1970s we often spoke of the "natural equilibrium," presuming a scientifically discernable ecological balance that could serve as a baseline and touchstone for environmental policy. We thought that if humans could maintain or restore natural equilibria that had been disrupted by human interventions, we would thereby serve the preservation of endangered species as well as general principles of sustainability.

Since the 1970s, however, general scientific consensus has come to the contrary view—nature does not have such equilibria.³² Natural systems, including wildlife ecosystems, are dynamic, constantly in the process of reactive change to their surroundings, morphing from one set of parameters to another. On one hand, some critics think this means that species preservation as a whole is misguided. If species populations are always in the process of change, including extinction, then the elimination of a species like the snail darter by a human dam building project, without regard to how justified the project may be, would just be part of nature. TVA would just be a reflection of the natural process of extinction. On the other hand, most ecologists hold the view that even though change is natural, humans accelerate the ecological changes and adjustments with a scope, frequency, and severity probably not seen since the end of the Cretaceous Era 65 million years ago when a ball of flaming asteroid hit the earth snuffing out the sunlight and triggering the end of the dinosaurs. After 200 million years of natural history in the Tennessee Valley, it took humans in TVA's federal agency offices merely 36 years to eliminate virtually all the flowing rivers in the region. The present scope, frequency, and severity of human disruptions of natural systems are such that they cannot be characterized as mere variations on natural dynamics. Human principles of respect for natural systems, and of restraint in disrupting natural systems, justify continued efforts to avoid unnecessary dislocations in our contextual ecosystems. The abandonment of clear concepts of natural equilibrium, however, often makes descriptions of why we protect endangered species more difficult to present to the generalist public.

³² See Bruce Pardy, *Changing Nature: The Myth of the Inevitability of Ecosystem Management*, 20 PACE ENVTL. L. REV. 675, 687 (2003) (examining the consequences of the "fluid and dynamic" state of natural systems); Judy L. Meyer, *The Dance of Nature: New Concepts in Ecology*, 69 CHI.-KENT L. REV. 875, 876 (1994) (discussing the shift in ecology to the conception of ecosystems as constantly changing).

Aldo Leopold used concepts of nature-as-equilibrium to assert a neo-Kantian ethical principle: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." ALDO LEOPOLD, *A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE* 224–25 (Oxford Univ. Press 1968) (1949).

Some scholars argue that Leopold's assertions are still relevant if you "dynamize" his words, interpreting "stability" as a consistent process of dynamic evolving change. J. Baird Callicott, *Do Deconstructive Ecology and Sociobiology Undermine Leopold's Land Ethic?*, 18 ENVTL. ETHICS 353, 369 (1996). With some difficulty, we are replacing the concept of a natural balance with a complex, stochastic, nonequilibrium model of stand-dynamics.

D. The Big Change: Endangered Species Have Become a Strategic Political Target of Opportunity

But I would argue that the biggest change in endangered species law and policy has been a shift in political context. In large part due to our snail darter case, the pork barrel political forces in Congress and the business establishment changed their generally benign view of the ESA as an ineffectual declaration of policy, and came to regard it as a major threat to pork barrel programs, capable of bringing pointed public scrutiny onto the particular costs and consequences of dubious projects.³³

Unfortunately aided by a warped mischaracterization of the ESA's most famous cases, including the snail darter, the foes of environmental regulation have been able to shift endangered species from a position of broad instinctive public support to a targeted wedge issue that often can be framed so as to invite trivialization and disrespect. The way our story was presented to the public—a silly, noneconomic little fish blocking a huge, important hydroelectric dam (never mind that that was factually completely incorrect)—evoked an immediate bemused response from American public opinion: "Maybe this ESA goes too far." Some sectors of the public undoubtedly drew the further conclusion that "if that is so, maybe other environmental protections are likewise too extreme."

The terms in which endangered species stories often are publicly trumpeted³⁴ provide exactly the wedge that the broad coalitions of antiregulatory lobbying groups have needed—the ESA as an example of supposed environmental extremism, a story-line that makes it safe to cast doubt on environmentalism generally and to call for the repeal or

³³ One of the most powerful immediate reactions against the darter injunction came from the backers of the Army Corps' Tennessee-Tombigbee project, a \$4 billion boondoggle cutting a navigation channel through the hills of northern Alabama to the Gulf of Mexico. The "Tenn-Tom" Project's proponents, including senior Southern senators in the appropriations and public works committees, feared that the ESA's substantive scrutiny could force consideration of the project's economic demerits, which otherwise were shielded from public scrutiny by the public works iron triangle. (An iron triangle is a political science term for specialized political alliances that take root within government. Iron triangles have three corners—one within the agencies, one within Congress, and the third in the marketplace. In the water project area you have an agency like TVA or the Corps that desires the power and momentum that comes from building a public works project with federal funds. Then, in Congress you have the pork committees and individual members of Congress who gain power, votes, and campaign contributions by bringing infusions of federal taxpayer dollars into their local districts. The third bloc consists of the special interests that profit from the projects or programs, which in the water project boondoggles include the businesses that get the federal construction contracts, other industries like barge transportation or irrigation businesses that in effect get their operations federally subsidized for free, real estate interests that can make windfalls by selling land to the agencies at a profit or getting free improvements to land they own, state and local politicians who are given the opportunity to run development boards or get to choose winners and losers in the details of project design, chambers of commerce whose members will make money from the windfall infusions of federal cash, and so on. It is a symbiosis.)

³⁴ The media coverage of *TVA v. Hill* and similar endangered species cases is explored in Zygmunt J.B. Plater, *Law and the Fourth Estate: Endangered Nature, The Press, and the Dicey Game of Democratic Governance*, 32 ENVTL. L. 1 (2002) [hereinafter *Fourth Estate*].

evisceration of this environmental statute. U.S. industry lobbyists have seized upon the supposed excesses of ESA law: spotted owls shutting down mill towns, kangaroo rats (*Dipodomys* spp.) causing suburban homes to go unprotected in California brushfires, endangered whales threatening to stop commercial shipping on the Atlantic seaboard. For them to levy direct lobbying attacks on air or water pollution statutes would be politically dangerous; the images that then would come to the public's mind would be of vulnerable humans choking for breath, or drinking-water sources choked with sludge and dead fish.

But the image brought to mind by endangered species protection does not evoke the same depth of direct human concerns—the image is perhaps of some photogenic fauna with fearful brown eyes, but that mental image can quickly extend to far less appealing lifeforms like spiders or newts. “The ESA is broadly supported by the public,” one pork barrel senator’s aide admitted to us. “But,” he smiled, “although it may be a mile wide, it’s only an inch deep.” If he and his allies could depict endangered species as conflicting with human welfare, the public would come to realize that this and other environmental regulations are out of balance and far too severe.

Today the ESA is continually targeted, I would argue, because it can be mischaracterized to support a collateral assault on environmental regulation generally, inviting caricatures of other environmental laws as trivial or extreme, and representing a supposed general need for draconian tradeoffs: “What should we be protecting, little animals or human economic welfare?” industry lobbyists ask, seeking to frame the core question for debate. “It’s a tradeoff: Environment or healthy human economics. You cannot have both.” This classic false dichotomy of an inexorable tradeoff is a powerful and seductive mind-framing which serves to undercut environmental regulation generally. It eclipses the oft-made point of modern environmental “sustainability” policy that “good ecology is good economics,” that planning and foresight are good for human society and the public’s optimal material welfare. The tradeoff premise is usually as wrong for endangered species cases as it is for environmental regulation generally, but the snail darter story was nevertheless hijacked into that tactical trap: The actual facts demonstrating the darter injunction’s positive role—blocking an economically irrational dam and promoting extremely beneficial alternative development designs—had to be obfuscated in order to make the little fish into a popular negative symbol of anti-human environmental extremism. The environmental common sense facts of subsequent endangered species cases, many studied later in this Symposium, continue to confront the curse of the false tradeoff.

Further, endangered species stories like the darter’s have also allowed antiregulatory business critics of environmental statutes to cultivate an odd premise upon which environmentalists’ motives are often severely criticized under an asymmetrical norm of motivational “purity.” Unlike citizen plaintiffs in air, water, and toxics cases, endangered species activists are repeatedly accused of hypocrisy, of not really being motivated by pure concern for the species they are defending. As Chief Justice Warren Burger glowered about the snail darter plaintiffs during the *TVA v. Hill* oral

argument: "[T]he snail darter was discovered, and became a handy *handle* to hold onto. . . . I'm sure that *they just don't want this project*."³⁵

The implication was that in these endangered species cases, legitimate advocates should be motivated only by altruistic ecological intentions, just by love of the species itself, not by "extraneous" considerations like the species' habitat qualities. I answered Chief Justice Burger by saying that the plaintiffs represented a wide range of different motivations, and that the darter, like a canary in a coal mine, was inextricably linked to its habitat, which meant that a range of deep human concerns inevitably tie into such cases where endangered species are threatened. In truth, most of us in the snail darter case came to care deeply about the fish as well as the demerits of the dam, but from the start the fish's practical leverage was critically important. Would we have devoted six years of enervating efforts, against great odds, putting our financial credit, tenure candidacies, and marriages at risk if the fish had implicated no collateral human and societal values? Probably not. Old Asa McCall had made it explicit at that meeting at old Fort Loudon: He was in the ESA fight to save his farm from a foolish project that our legal system offered no other way to stop. We surely would have liked to add a straightforward count to our complaint under the National Prevention of Economically Irrational Federal Projects Act (NPEIFPA), but up to this point Congress has not passed such a law and it is quite unlikely ever to do so. Endangered species proponents then and now continue to be tarred with the brush of "impure" motivations and opportunistic hypocrisy for their inevitably pragmatic combinations of means and ends. And note that this normative judgment standard is quite asymmetrical: No one suggests that entrepreneurial promoters of environmentally destructive projects be held to a purity standard whereby they must be motivated by the particular objectives of any statute, or by the public's actual best interests.

The subsequent history of the ESA continually reverberates with reactions to the snail darter case, many of them highly unappreciative of our citizen efforts to stop the Tellico Dam. Forgotten are the merits of the God Squad's analysis showing that endangered species protection served common economic sense. Since those seminal days of the 1970s, the rational merits of species protection too often continue to be drowned out in the media and the political establishment by the characterization of such suits as irrational environmental extremism. This is a very different political context from the ESA's halcyon image when it was originally signed into law.

³⁵ Transcript of Oral Argument at 60–61, *TVA v. Hill*, 437 U.S. 153 (1978) (No. 76-1701) (emphasis added from memory). According to rumors from the Court, Chief Justice Burger—who was quite antagonistic to the citizens' position during oral argument and quite sarcastic in announcing the decision, calling it an anachronism that Congress should not hesitate to override—was swung into the six-to-three majority by the realization that TVA would lose by at least five to four, and that by switching he could assign the opinion to himself and blunt its impact. The author believes it more likely that the Chief Justice was swayed by a portion of the citizens' oral argument that cited favorably and relied upon an injunction opinion written by the Chief Justice.

V. SOME THINGS THAT HAVE REMAINED THE SAME

Although many elements of endangered species law have changed dramatically since the 1970s, a number of its features have remained very much the same.

Habitat derogation remains the major cause of endangerment of species, and that means that often, by the very fact of their existence as endangered species in a particular place, endangered species continue to operate as sensitive eco-legal barometers of ongoing human-caused environmental harms that concurrently raise substantial human concerns. This is a utilitarian argument for species preservation, positing that species often act as "canaries in the coal mine" when they act as early-warning indicators identifying significant malfunctions and circumstances requiring incisive scrutiny by the political process. Over the years of the snail darter battle we were generally unsuccessful in persuading the media and political debates to acknowledge the concept of the "canary in the coal mine," but the empirical logic remains true, and subsequent recognition of that role for endangered species regularly recurs.³⁶

The Supreme Court's opinion in *TVA v. Hill* is still good law, with Chief Justice Burger's stentorian declaration repeatedly echoed in successive endangered species cases: "Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as 'institutionalized caution.'"³⁷ Moreover, beyond endangered species cases, *TVA v. Hill* continues to be cited for the proposition that courts should not casually adjust the terms of statutes written by Congress, but should require injunctive compliance in deference

³⁶ Just last year, the Tenth Circuit employed the "canary in the coal mine" metaphor:

Scientific literature likens the silvery minnow, [sic] to a canary in a coal mine, the "last-remaining endemic pelagic spawning minnow in the Rio Grande basin." . . . [W]e echo *Hill's* "concern over the risk that might lie in the loss of *any* endangered species." . . . [E]ndangered species provide "keys to puzzles which we cannot solve, and may provide answers to questions which we have not yet learned to ask." . . . Like all parts of that puzzle, the silvery minnow provides a measure of the vitality of the Rio Grande ecosystem, a community that can thrive only when all of its myriad components—living and non-living—are in balance.

Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109, 1138 (10th Cir. 2003), *vacated by* 355 F.3d 1215 (10th Cir. 2004) (internal citations omitted).

The court emphasized that keeping water in the river to protect the fish serves a newly recognized need for "additional development of fish and wildlife values, and recreation facilities . . . through the Middle Rio Grande Valley to satisfy the increasing demand by the large number of out-of-state visitors, together with the local demand for such facilities." *Id.* at 1125 (internal quotation omitted). See also Oliver A. Houck, *Why Do We Protect Endangered Species, and What Does That Say About Whether Restrictions on Private Property to Protect Them Constitute "Takings"?*, 80 IOWA L. REV. 297, 327–28 (1995) (discussing the relationship between the protection of endangered species and pollution control); Zygmunt J.B. Plater, *The Embattled Social Utilities of the Endangered Species Act—A Noah Presumption and Caution Against Putting Gasmasks on the Canaries in the Coalmine*, 27 ENVTL. L. 845, 846 (1997) (asserting the importance of the social "canary-in-the-coalmine" function of the ESA).

³⁷ *TVA v. Hill*, 437 U.S. 153, 194 (1978).

to statutory mandates, leaving it to the legislature to make necessary adjustments and amendments.³⁸

Endangered species law continues to reverberate with battles over the proper application of science to environmental regulatory settings. The *Daubert v. Merrill Dow Pharmaceuticals, Inc.*³⁹ decision has not brought clarity to questions about how scientific testimony is to be brought into the courtroom, and as with our snail darter case back in the 1970s, there are continuing arguments about what is "good science," how much scientific certainty or consensus should be required to regulate, and the differences between standards of legal proof and scientific proof—in short, science is still continually subject to being turned into a political football.⁴⁰

³⁸ See Daniel A. Farber, *Statutory Interpretation and Legislative Supremacy*, 78 GEO. L.J. 281, 294–98 (1989) (discussing the Court's implementation of the supremacy principle in interpreting the ESA in *TVA v. Hill*).

TVA v. Hill has been cited in more than 800 subsequent cases, often for its mandate that statutes be enforced as written, by injunction if necessary.

If the Government believes that the better rule is different from what is currently the law, the Government can petition Congress to change it. See *TVA v. Hill*, 437 U.S. 153, 194 (1978) ("Our individual appraisal of the wisdom or unwisdom of a particular course consciously selected by the Congress is to be put aside in the process of interpreting a statute.").

United States v. Mezzanatto, 513 U.S. 196, 213 n.1 (1995) (Souter, J., dissenting).

[U]nder our system of government, it is not our business or the EPA's business to rewrite a clear statute so that it will better reflect "common sense and the public weal." . . . Only Congress can do that. If the EPA wishes to provide St. Louis with any classification other than serious, it must petition Congress to change the law.

Sierra Club v. EPA, 311 F.3d 853, 862 (7th Cir. 2002) (quoting *TVA v. Hill*, 437 U.S. 153, 195 (1978)).

[W]e cannot apply the NFMA mandate in a way that effectively abolishes the specific statutory mandates Congress has established. That is the law even if reason and equity support a different conclusion. See [*TVA v. Hill*, 437 U.S. at 194]. Accordingly, we hold that the . . . management plans must comply with its specific mandate.

Sierra Club-Black Hills Group v. United States Forest Serv., 259 F.3d 1281, 1287 (10th Cir. 2001). See also *Loggerhead Turtle v. County Council of Volusia County*, 148 F.3d 1231, 1246 (11th Cir. 1998) (injunction ordered); *contra Weinberger v. Romero-Barcelo*, 456 U.S. 305 (1982).

³⁹ 509 U.S. 579 (1993).

⁴⁰ The ESA's section 4 provisions—setting out how Interior shall place species on the endangered species list and designate critical habitat—were amended to include a proviso that listings in both cases must be "on the basis of the best scientific data available," 16 U.S.C. § 1533(b)(1)(A) (2000), a requirement that the legislative history indicates was intended to delay listings and support challenges to listings. The Data Quality Act (also known as the "Information Quality Act"), a single-paragraph provision inserted into a massive appropriations bill by an antiregulation legislative aide, further complicates the use of science in agency decisions. Treasury and Government Appropriations Act for Fiscal Year 2001, Pub. L. No. 106-554, § 515, 114 Stat. 2763, 2763A-153 (2000). See Bryant Urstadt, *One-Act Farce*, HARPER'S MAG., June 1, 2003, at 52 (noting that the Data Quality Act was inserted into the massive appropriations bill by an anti-regulation lobbyist); Donald Hornstein, *Accounting for Science: The Independence of Public Research in the New Subterranean Administrative Law*, 66 LAW & CONTEMP. PROBS. 229 (2003) (discussing the risk of error in result-minded research in both the educational and corporate settings). The Data Quality Act provides weaponry for regulated industries to challenge regulations by forcing agencies to put their administrative records to strict tests of scientific accuracy, missing the point that in many fields, like environmental regulation,

Public support for endangered species protection continues to be strong as well. In repeated polls, the public indicates that the extinction of species—even though its consequences to humans may be highly intangible—nevertheless implicates substantial human values. A number of church coalitions have continued to echo this theme, emphasizing that our society has stewardship obligations, like Noah in the Ark, to protect and preserve God's creatures against senseless elimination.⁴¹

Also unchanged is the fact that media coverage continues to be critically important to the shaping and resolution of major public policy debates. As in the snail darter case, when the political realm is so dominated by an establishment coalition like the pork barrel, and the courts cannot be relied on as an ultimate determining forum, rational formation of public policy requires an informed, active media, discerning and publicizing the public interest issues revealed in endangered species conflicts.⁴² Beyond endangered species per se, environmental law and democratic governance require the structural support of a media that recognizes its high calling in informing the political process.

And finally, a critically important part of endangered species law that continues as it was in the early 1970s is the strategic role of citizen litigation. Building from the example of civil rights activists' attempts to enforce the 1868 Civil Rights Acts in the face of agency torpidity, the environmental activists who pushed dozens of statutes onto the books in the 1970s almost always included citizen suit and fee-shifting provisions that thereafter allowed private enforcement actions to push the statutory texts into effective practice.⁴³ Over the years, the regulatory structures of endangered species law and environmental law have arguably been shaped far more by citizen efforts in the legislatures, agencies, and courts than by official self-initiative. From the start, this phenomenon of citizen catalysis of environmental law attracted the attention and opposition of antiregulatory interests opposing environmental protection law generally. Pluralistic citizen

government is supposed to use the precautionary principle, regulating in situations where the common law, for instance, would not yet be able to restrict dangerous actions because it was not yet able to prove actual causation.

⁴¹ Along with a number of religious environmental coalitions, the National Religious Partnership for Environment (NRPE) has supported organized campaigns to protect the ESA as a matter of religious stewardship duty.

One of the most publicized events of the church-based environmental work was the Evangelical Environmental Network's [one of NRPE's religious blocs] foray into the mudslinging world of Capitol Hill. "This is a community stereotypically regarded as being in the heart of the religious right[.] . . . Here they were coming forward with a strong religious message saying 'don't touch the Endangered Species Act' — this from a community that has been utterly beyond the reach of the environmental movement."

Beth Baker, *A Reverent Approach to the Natural World*, 46 *BIOSCIENCE* 23 (1996), available at <http://www.webofcreation.org/education/articles/baker.htm> (quoting Paul Gorman, Executive Director, NRPE).

⁴² See *Fourth Estate*, *supra* note 13, at 2 (noting the critical role the press plays in resolving public interest controversies).

⁴³ Like most other statutes, the ESA contains a citizen suit provision. 16 U.S.C. § 1540(g) (2000).

participation in environmental governance has prompted attacks on grants of judicial standing, as well as on justiciability, availability of remedies, and fee-shifting. These initiatives can be tracked most notably in the restrictive efforts of Justice Antonin Scalia.⁴⁴ As *Friends of the Earth v. Laidlaw Environmental Services, Inc.*⁴⁵ has reaffirmed over Justice Scalia's sharp dissent, however, citizen litigation continues to be recognized as an important part of the modern pluralistic frame of American democratic governance, and the tightening gauntlet that had been drawn around citizen statutory enforcement appears to have loosened. The kind of citizen effort that shaped the Tellico Dam litigation continues to characterize the stream of endangered species enforcement initiatives, and of environmental and public interest law generally in the United States.

VI. CONCLUSION

Some thirty years ago the ESA was brought from briefly dormant obscurity into the realm of active case law, and into the lively cognizance of American public opinion, in a dramatic moment that continues to reverberate in legal doctrine and political debate. The more we learn about endangered species law, the more we recognize that it too can never be adequately captured in simplified terms. Human ecosystems, and the ecosystems of wildlife and natural resources that provide the context for human society, are complex and often intertwined. The more we learn about ecology, however, the more we understand that good ecology and sustainable human development can and must coexist, despite the vehement resistance of old line corporate and bureaucratic players. Ultimately, endangered species law provides prime examples, old and new, of the fact that humans and endangered species must continue to cope with this complexity together.

⁴⁴ Reacting to the language of Judge J. Skelly Wright in the classic decision *Calvert Cliffs' Coordinating Committee, Inc. v. United States Atomic Energy Commission*, which asserted that the goal of citizen suits was to ensure that important congressional environmental mandates not be "lost or misdirected in the vast hallways of the federal bureaucracy," 449 F.2d 1109, 1111 (D.C. Cir. 1971), Justice Scalia asked:

Does what I have said mean that . . . "important legislative purposes, heralded in the halls of Congress, [can be] lost or misdirected in the vast hallways of the federal bureaucracy?" Of course it does—and a good thing, too. . . . [L]ots of once-heralded programs ought to get lost or misdirected, in vast hallways or elsewhere.

Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881, 897 (1983) (quoting *Calvert Cliffs' Coordinating Comm.*, 449 F.2d at 1111). See also NATURE, LAW & SOCIETY, *supra* note 1, at 408–17.

⁴⁵ 528 U.S. 167 (2000).